

# EXHIBIT H

# **McGraw-Hill Dictionary of Scientific and Technical Terms Fifth Edition**

**Sybil P. Parker**  
Editor in Chief

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**On the cover: Photomicrograph of crystals of vitamin B<sub>12</sub>.  
(Dennis Kunkel, University of Hawaii)**

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### **McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS, Fifth Edition**

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and the point measured on a great circle perpendicular to the equator. { ,dek-lə'nā-shən }

**declination axis** [ENG] For an equatorial mounting of a telescope, an axis of rotation that is perpendicular to the polar axis and allows the telescope to be pointed at objects of different declinations. { ,dek-lə'nā-shən ,ak-səs }

**declination circle** [ENG] For a telescope with an equatorial mounting, a setting circle attached to the declination axis that shows the declination to which the telescope is pointing. { ,dek-lə'nā-shən ,sə-kəl }

**declination compass** See declinometer. { ,dek-lə'nā-shən ,kəm-pəs }

**declination difference** [NAV] The difference between two declinations, particularly between the declination of a celestial body and the value used as an argument for entering a table. { ,dek-lə'nā-shən ,dif-rəns }

**declination of grid north** See grid declination. { ,dek-lə'nā-shən əv ,grɪd 'nɒrθ }

**declination variometer** [ENG] An instrument that measures changes in the declination of the earth's magnetic field, consisting of a permanent bar magnet, usually about 0.4 inch (1 centimeter) long, suspended with a plane mirror from a fine quartz fiber 2-6 inches (5-15 centimeters) in length; a lens focuses to a point a beam of light reflected from the mirror to recording paper mounted on a rotating drum. Also known as D variometer. { ,dek-lə'nā-shən ,ver-ē'ām-əd-ər }

**declining population** [ECOL] A population in which old individuals outnumber young individuals. { də'klin-iŋ ,pāp-yə'lā-shən }

**declinometer** [ENG] A magnetic instrument similar to a surveyor's compass, but arranged so that the line of sight can be rotated to conform with the needle or to any desired setting on the horizontal circle; used in determining magnetic declination. Also known as declination compass. { ,dek-lə'nām-əd-ər }

**declivity** [GEOL] 1. A slope descending downward from a point of reference. 2. A downward deviation from the horizontal. { də'kliv-əd-ē }

**decode** [COMMUN] 1. To translate coded characters into a more understandable form. 2. See demodulate. { də'kōd }

**decoder** [COMMUN] A device that decodes. [ELECTR] 1. A matrix of logic elements that selects one or more output channels, depending on the combination of input signals present. 2. See decoder circuit; matrix; tree. { də'kōd-ər }

**decoder circuit** [ELECTR] A circuit that responds to a particular coded signal while rejecting others. Also known as decoder. { də'kōd-ər ,sə-rkət }

**decoding gate** [COMPUT SCI] The use of combinatorial logic in circuitry to select a device identified by a binary address code. Also known as recognition gate. { də'kōd-iŋ ,gāt }

**decoking** [CHEM ENG] Removal of petroleum coke from equipment. { də'kōk-iŋ }

**decollator** [COMPUT SCI] A device which separates the sheets of continuous stationery that form the output of a computer printer into separate stacks. { də'kō ,lād-ər }

**décollement** [GEOL] Folding or faulting of sedimentary beds by sliding over the underlying rock. { də'kāl-mənt }

**decolorize** [CHEM ENG] To remove the color from, as from a liquid. { də'kəl-ə ,rɪz }

**decolorizer** [CHEM ENG] An agent used to decolorize; the removal of color may occur by a chemical reaction or a physical reaction. { də'kəl-ə ,rɪz-ər }

**decolorizing carbon** [CHEM] Porous or finely divided carbon (activated or bone) with large surface area; used to adsorb colored impurities from liquids, such as lube oils. { də'kəl-ə ,rɪz-iŋ ,kār-bən }

**decimeter** [ELECTR] An adding-type phasemeter which rotates continuously and adds up the total number of degrees of phase shift between two signals, such as those received from two transmitters in the Decca navigation system. { də'kām-əd-ər }

**decommissioning** [NUCLEO] The process of shutting down a nuclear facility such as a nuclear reactor or reprocessing plant so as to provide adequate protection from radiation exposure and to isolate radioactive contamination from the human environment. { də-kə'mish-ən-iŋ }

**decumulation** [ELECTR] The process of recovering a signal from the composite signal previously created by a commutation process. { də ,kām-yə'tā-shən }

**decumulator** [ELECTR] The section of a telemetering sys-

tem that extracts analog data from a time-serial train of samples representing a multiplicity of data sources transmitted over a single radio-frequency link. { də'kām-yə ,tād-ər }

**decupensation** [PSYCH] The deterioration of existing defense mechanisms, leading to an exacerbation of pathologic behavior. { də ,kām-pən'sā-shən }

**decomposable process** [MATH] A process which can be reduced to several basic events. { də'kām'pō-zə-bəl 'prās-əs }

**decomposer** [ECOL] A heterotrophic organism (including bacteria and fungi) which breaks down the complex compounds of dead protoplasm, absorbs some decomposition products, and releases substances usable by consumers. Also known as microcomposer; microconsumer; reducer. { də'kām'pō-zər }

**decomposition** [CHEM] The more or less permanent structural breakdown of a molecule into simpler molecules or atoms. [GEOCHEM] See chemical weathering. [MATH] The expression of a fraction as a sum of partial fractions. { də ,kām'pə'zish-ən }

**decomposition potential** [PHYS CHEM] The electrode potential at which the electrolysis current begins to increase appreciably. Also known as decomposition voltage. { də ,kām'pə'zish-ən pə ,ten'chəl }

**decomposition voltage** See decomposition potential. { də ,kām'pə'zish-ən ,vōl-tij }

**decompound** [BOT] Divided or compounded several times, with each division being compound. { də'kām ,paund }

**decompression** [ENG] Any procedure for the relief of pressure or compression. { də'kām'presh-ən }

**decompression chamber** [ENG] 1. A steel chamber fitted with auxiliary equipment to raise its air pressure to a value two to six times atmospheric pressure; used to relieve a diver who has decompressed too quickly in ascending. 2. Such a chamber in which conditions of high atmospheric pressure can be simulated for experimental purposes. { də'kām'presh-ən ,chām-bər }

**decompression illness** See aeroembolism. { də'kām'presh-ən ,il'nəs }

**decompression table** [ENG] A diving guide that lists ascent rates and breathing mixtures to provide safe pressure reduction to atmospheric pressure after a dive. { də'kām'presh-ən ,tā-bəl }

**deconcentrator** [ENG] An apparatus for removing dissolved or suspended material from feedwater. { də'kāns-ən ,trād-ər }

**decontamination** [ENG] The removing of chemical, biological, or radiological contamination from, or the neutralizing of it on, a person, object, or area. { də'kən ,tam-ə'nā-shən }

**decontamination factor** [NUCLEO] The ratio of initial specific radioactivity to final specific radioactivity resulting from a separation process. { də'kən ,tam-ə'nā-shən ,fak-tər }

**decontamination index** [NUCLEO] The logarithm of the ratio of initial specific radioactivity to final specific radioactivity resulting from a separation process. { də'kən ,tam-ə'nā-shən ,in ,deks }

**decoppering agent** [ORD] Material, such as finely divided tin, included in a propelling charge, or inserted in the chamber with the propelling charge, for the purpose of removing the coppering from the surface of the bore. { də'kāp-ə-rɪŋ ,ā-jənt }

**decorative stone** [MATER] A stone that serves for architectural decoration, as in mantles or store fronts. { 'dek-rəd-iv 'stōn }

**decorticate** [BIOL] Lacking a cortical layer. [TEXT] To remove woody residual matter, such as flax from bast fibers after retting. { də'kōrd-ə ,kāt }

**decouple** [ENG] 1. To minimize or eliminate airborne shock waves of a nuclear or other explosion by placing the explosives deep under the ground. 2. To minimize the seismic effect of an underground explosion by setting it off in the center of an underground cavity. { də'kəp-əl }

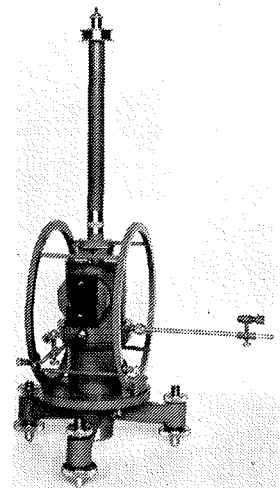
**decoupling** [ELEC] Preventing transfer or feedback of energy from one circuit to another. { də'kəp-liŋ }

**decoupling era** [ASTRON] The time about 300,000 years after the big bang when matter and radiation, which had previously been strongly coupled, practically ceased to interact, electrons were able to attach to nuclei and form atoms, and photons could propagate freely. { də'kəp-liŋ ,ir-ə }

**decoupling filter** [ELECTR] One of a number of low-pass filters placed between each of several amplifier stages and a common power supply. { də'kəp-liŋ ,fɪl-tər }

**decoupling network** [ELEC] Any combination of resistors,

## DECLINATION VARIOMETER



Declination variometer equipped with Helmholtz coil for calibration. (U.S. Coast and Geodetic Survey)

coils, and capacitors placed in power supply leads or other leads that are common to two or more circuits, to prevent unwanted interstage coupling. { dē'kəp'liŋ ,net,wərk }

**decoy** [ORD] 1. An object with reflective characteristics of a target, used in radar deception. 2. Underwater device which reflects acoustic radiation, used by submarines in the deception of acoustic listening devices and acoustic homing torpedoes. { 'dē,koi }

**decoy target** [ORD] A device assembled from prefabricated materials, designed to simulate miscellaneous types of field equipment. { 'dē,koi ,tārgət }

**decoy transponder** [ELECTR] A transponder that returns a strong signal when triggered directly by a radar pulse, to produce large and misleading target signals on enemy radar screens. { 'dē,koi tran ,spän-dər }

**decreasing function** [MATH] 1. A function of  $x$  whose value gets smaller as  $x$  gets larger, that is, if  $x < y$ , then  $f(x) > f(y)$ . 2. See monotone nonincreasing function. { di'krēs-iŋ ,fəŋk-shən }

**decrement** [COMPUT SCI] 1. A specific part of an instruction word in some binary computers, thus a set of digits. 2. For a counter, to subtract 1 or some other number from the current value. [HYD] See groundwater discharge. [MATH] The quantity by which a variable is decreased. [PHYS] The ratio of the amplitudes of an underdamped harmonic motion during two successive oscillations. Also known as damping factor; numerical decrement. { 'dek-rə-mənt }

**decremental arc** [ASTRON] A crater arc in which the diameters of the craters decrease from one end of the arc to the other. { 'dek-rə'ment-əl 'ärk }

**decremental chain** [ASTRON] A crater chain in which the diameters of the craters decrease from one end of the chain to the other. { 'dek-rə'ment-əl ,čän }

**decrement field** [COMPUT SCI] That part of an instruction word which is used to modify the contents of a storage location or register. { 'dek-rə-mənt ,fēld }

**decrement gage** [ENG] A type of molecular gage consisting of a vibrating quartz fiber whose damping is used to determine the viscosity and, thereby, the pressure of a gas. Also known as quartz-fiber manometer. { 'de-krə-mənt ,gāj }

**decrementer** [ENG] An instrument for measuring the logarithmic decrement (damping) of a train of waves. { 'dek-rə,mēd-ər }

**decrepitation** [GEOPHYS] Breaking up of mineral substances when exposed to heat; usually accompanied by a crackling noise. { di,krep-ə'tā-shən }

**decrypt** [ELECTR] To convert a cryptogram or series of electronic pulses into plain text by electronic means. { dē'kript }

**Dectra** [NAV] A radio navigation aid that provides coverage over a specific section of a long ocean route, using equipment and techniques similar to Decca; a master station and a slave station are located at each end of the route; by comparing the phase difference of a master and its slave, guidance is provided to the right or left of the course; comparison of transmission with those of a high-precision quartz clock provides distance information along the course. { 'dek-trə }

**decubitus ulcer** [MED] An ulcer of the skin and subcutaneous tissues following prolonged lying down, due to pressure on bony protuberances. Also known as bedsore; pressure ulcer. { dē'kyü-bəd-əs 'ul-sər }

**decumbent** [BOT] Lying down on the ground but with an ascending tip, specifically referring to a stem. { di'kəm-bənt }

**decurrent** [BOT] Running downward, especially of a leaf base extended past its insertion in the form of a winged expansion. { di'kər-ənt }

**decussate** [BOT] Of the arrangement of leaves, occurring in alternating pairs at right angles. [SCI TECH] To intersect in the form of an X. { 'dek-ə,sāt }

**decussate structure** [GEOL] A crisscross microstructure of certain minerals; most noticeable in rocks composed predominantly of minerals with a columnar habit. { 'dek-ə,sāt ,strək-čər }

**decyl** [ORG CHEM] An isomeric grouping of univalent radicals, all with formulas  $C_{10}H_{21}$ , and derived from the decanes by removing one hydrogen. { 'des-əl }

**decyl acetate** [ORG CHEM]  $CH_3(CH_2)_9OOCCH_3$  Perfumery liquid with a floral orange-rose aroma. { 'des-əl 'as-ə,tāt }

**decyl alcohol** [ORG CHEM]  $C_{10}H_{21}OH$  A colorless oil, boil-

ing at 231°C; used in plasticizers, synthetic lubricants, and detergents. Also known as decanol. { 'des-əl 'al-kə,həl }

**decyl aldehyde** [ORG CHEM]  $CH_3(CH_2)_8CHO$  A liquid aldehyde, found in essential oils; used in flavorings and perfumes. { 'des-əl 'al-də,hīd }

**decylene** [ORG CHEM] Any of a group of isomeric hydrocarbons with formula  $C_{10}H_{20}$ ; the group is part of the ethylene series. { 'des-ə,lēn }

**decyltrichlorosilane** [ORG CHEM]  $n-C_{10}H_{21}SiCl_3$  An organochlorosilane that boils at 183°C at 84 mmHg; used in coupling agents or primers to obtain improved bonding between organic polymers and mineral surfaces. { 'des-əl'trī,'klór-ō'sī,lān }

**Dedekind cut** [MATH] A set of rational numbers satisfying certain properties, with which a unique real number may be associated; used to define the real numbers as an extension of the rationals. { 'dā-də'kint ,kət }

**Dedekind test** [MATH] If the series

$$\sum_i (b_i - b_{i+1})$$

converges absolutely, the  $b_i$  converge to zero, and the series

$$\sum_i a_i$$

has bounded partial sums, then the series

$$\sum_i a_i b_i$$

converges. { 'dā-də'kint ,test }

**dedendum** [DES ENG] The difference between the radius of the pitch circle of a gear and the radius of its root circle. { dā'den-dəm }

**dedendum circle** [DES ENG] A circle tangent to the bottom of the spaces between teeth on a gear wheel. { dā'den-dəm ,sərkəl }

**dedicated line** [COMPUT SCI] A permanent communications link that is used solely to transmit information between a computer and a data-processing system. { 'ded-ə,kād-əd 'līn }

**dedicated terminal** [COMPUT SCI] A computer terminal that is permanently connected to a data-processing system by a communications link that is used only to transmit information between the two. { 'ded-ə,kād-əd 'tərm-ən-əl }

**dedifferentiation** [BIOL] Disintegration of a specialized habit or adaptation. [CYTOL] Loss of recognizable specializations that define a differentiated cell. [PHYSIO] Return of a specialized cell or structure to a more general or primitive condition. { dē,dif-ə,ren-čē'ā-shən }

**dedolomitization** [GEOL] Destruction of dolomite to form calcite and periclase, usually by contact metamorphism at low pressures. { dē,dō-lə,mīd-ə'zā-shən }

**deduction** [MATH] The process of deriving a statement from certain assumed statements by applying the rules of logic. { di'dək-shən }

**dedusting** [MIN ENG] Cleaning ore, using pneumatic means and screening, to remove dust and other fine impurities. Also known as aspirating. { dē'dəst-iŋ }

**dee** [NUCLEO] A hollow accelerating-cyclotron electrode in the shape of the letter D. Also known as cyclotron D; D. { dē }

**dee line** [NUCLEO] A structural member that supports the dee of a cyclotron and acts with the dee to form the resonant circuit. { 'dē ,līn }

**deemphasis** [ENG ACOUS] A process for reducing the relative strength of higher audio frequencies before reproduction, to complement and thereby offset the preemphasis that was introduced to help override noise or reduce distortion. Also known as postemphasis; postequalization. { dē'em-fə'səs }

**deemphasis network** [ENG ACOUS] An RC filter inserted in a system to restore preemphasized signals to their original form. { dē'em-fə'səs ,net,wərk }

**deenergize** [ELEC] To disconnect from the source of power. { dē'en-ə'r,jīz }

**deep** [OCEANOGR] An area of great depth in the ocean, representing a depression in the ocean floor. { dēp }

**deep-casting** [OCEANOGR] Sampling ocean water at great